Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An alloy which comprises:

Si : 6.5 - 7.5 wt%

Fe : up to 0.20 wt%

Cu : up to 0.05 wt%

Mn : up to 0.05 wt%

Mg : 0.40 to 0.45 wt%

Zn : up to 0.05 wt%

Ti : up to 0.20 wt%

and the balance Al and other components, wherein said other components comprise a total of not more than 0.15 wt% of said alloy and any single component of said other components does not exceed 0.05 wt% of said alloy, the alloy having a microstructure which includes a primary aluminum-containing matrix and one or more iron-containing phases dispersed in the matrix, wherein the sole or predominant iron-containing phase is β∃ phase that has formed as a transformation product of π phase and wherein the matrix has a dendrite arm spacing of between 10 and 45 μm~~m~~.

2. (Currently Amended) The alloy defined in claim 1, wherein when the alloy includes more than one iron-containing phase, the iron-containing phases also include π ~~pi.~~ phase.

3. (Currently Amended) The alloy defined in claim 2, wherein the π ~~pi.~~ phase is up to 30 vol % of the iron-containing phases.

4. (Canceled)

5. (Currently Amended) A method for manufacturing an alloy article comprising the steps of:

(a) providing a melt having a composition of:

Si : 6.5 - 7.5 wt%

Fe : up to 0.20 wt%

Cu : up to 0.05 wt%

Mn: up to 0.05 wt%

Mg : 0.40 to 0.45 wt%

Zn: up to 0.05 wt%

Ti : up to 0.20 wt%

and the balance Al and other components, said other components comprising a total of not more than 0.15 wt% of said alloy and any single component of said other components not exceeding 0.05 wt% of said alloy,

(b) casting said melt and solidifying a casting at a cooling rate that produces a microstructure of an aluminum-containing matrix and π ~~B~~ and β ~~∃~~ iron-containing phases

dispersed in the matrix, wherein the cooling rate on solidification is sufficient to produce a dendrite arm spacing in the matrix of between 10 and 45 μm~~:m~~;

(c) solution heat treating the casting to at least partially transform π~~.A~~ phase to β∃ phase; and

(d) quenching the casting to form the alloy article.

6. (Canceled)

7. (Currently Amended) The method defined in claim 5, wherein the sole or predominant iron-containing phase in the alloy article is β~~.beta.~~ phase.

8. (Currently Amended) The method defined in claim 5, wherein when the alloy includes more than one iron-containing phase in the alloy article, the iron-containing phases also include π~~.pi.~~ phase.

9. (Currently Amended) The method defined in claim 8, wherein the π~~.pi.~~ phase is up to 30 vol % of the iron-containing phases.

10. (Currently Amended) The method defined in claim 5, wherein the step of solidifying the casting produces iron-containing phases that include a substantial proportion of π~~.pi.~~ phase and the subsequent solution heat treatment step is effective to convert a majority of the π~~.pi.~~ phase to β~~.beta.~~ phase to give a microstructure in the alloy article that includes iron-containing phases which are predominantly β~~.beta.~~ phase.

11. (Previously Presented) The method defined in claim 5, wherein prior to casting the melt is at a temperature above the liquidus temperature of the alloy.

12. (Currently Amended) The method defined in claim 5, wherein the quenching step is in hot water having a temperature of 70-80°~~.degree.~~ C.

13. (Currently Amended) The method defined in claim 5, the steps further including~~includes~~ an aging~~ageing~~ heat treatment of the alloy article.

14. (Currently Amended) The method defined in claim 13, wherein the aging~~ageing~~ heat treatment includes heating the alloy article to a temperature of 140-170°~~.degree. C.~~, holding the alloy article at that temperature for 1-10 hours, and air cooling the alloy article to room temperature.

15-17. (Canceled)

18. (Previously Presented) The method defined in claim 10, wherein, prior to casting, the melt is at a temperature above the liquidus temperature of the alloy.

19. (Previously Presented) The method defined in claim 18, wherein the quenching step is in hot water having a temperature of 70-80°C.

20. (New) An alloy comprising:

Si : 6.5 - 7.5 wt%

Fe : up to 0.20 wt%

Cu : up to 0.05 wt%

Mn : up to 0.05 wt%

Mg : 0.40 to 0.45 wt%

Zn : up to 0.05 wt%

Ti : up to 0.20 wt%

and the balance Al and other components, wherein said other components comprise a total of not more than 0.15 wt% of said alloy and any single component of said other components does not exceed 0.05 wt% of said alloy;

wherein said alloy has a microstructure which includes a primary aluminum-containing matrix and one or more iron-containing phases dispersed in the matrix, wherein the sole or predominant iron-containing phase is β phase that has formed as a transformation product of π phase, the matrix having a dendrite arm spacing of between 10 and 45 μm;

wherein said alloy satisfies the following relationship:

$Q.I. = UTS + 150 \log_{10} E$

where Q.I. is Quality Index (Mpa), UTS is Ultimate Tensile Strength (Mpa), and E is Elongation at Fracture (%); and

wherein for said Mg content of 0.40 to 0.45 wt%, said Q.I. does not vary substantially with small changes in said Mg content.

21. (New) A method for manufacturing an alloy article comprising the steps of:

(a) providing a melt having a composition of:

Si : 6.5 - 7.5 wt%

Fe : up to 0.20 wt%

Cu : up to 0.05 wt%

Mn: up to 0.05 wt%

Mg : 0.40 to 0.45 wt%

Zn: up to 0.05 wt%

Ti : up to 0.20 wt%

and the balance Al and other components, said other components comprising a total of not more than 0.15 wt% of said alloy and any single component of said other components not exceeding 0.05 wt% of said alloy;

(b) casting said melt and solidifying a casting at a cooling rate that produces a microstructure of an aluminum-containing matrix and π and β iron-containing phases dispersed in the matrix, wherein the cooling rate on solidification is sufficient to produce a dendrite arm spacing in the matrix of between 10 and 45 μm;

(c) solution heat treating the casting for 2 to 4 hours to produce desired levels of transformation of π phase to β phase; and

(d) quenching the casting to form the alloy article.